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# ALL FIRST CLASS MAIL BY AIR?

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THE nation's far-flung postal and aviation networks are cooperating on an experimental project destined to open a new era in American communications. The project is of importance to everyone who uses the U.S. mails. Its development is of vital interest to the United States government as well as the airlines.

The experiment began in September, 1953 when the Post Office Department started to move all first class mail by air between Chicago and New York and between Chicago and Washington, on a "space available" basis.

In February of this year, this experiment was extended with respect to first class mail between New York, Washington and Chicago, on the one hand, and certain Florida cities on the other.

The Post Office Department has recently announced plans to inaugurate a similar service between Seattle and San Diego via 17 intermediate points, including such heavy traffic points as Portland, San Francisco, Sacramento, Oakland and Los Angeles. This service also touches many lighter traffic points such as Medford and Klamath Falls, Oregon.

The West Coast phase of the project is a much more ambitious program than the initial experiments in 1953 which involved longer haul mail deliveries between terminals. The new phase will provide experience comparable to actual conditions when the program is brought into permanent nation-wide use. Experience gained from these pilot projects should be the forerunner for transporting all first class mail by air between all points where the mail can be expedited.

Such a modern development in the nation's postal and air system would be in the public interest. Any improvement in the speed of communications is beneficial. Domestic airlines would be aided through increased revenues. Necessary but minor modification in the postal rate structure would help the Post Office Department.

The program would be harmful only to the railroads. They have been carrying practically all of the first class mail and naturally would like to continue doing so. This relatively small harm to the railroads

should not be permitted to block important progress in the nation's postal services of benefit to the entire public.

The ultimate development of transporting all first class mail by air when it can be expedited raises several questions:

1) What portion of the total non-local, first class mail volume can be expedited?

2) What additional volume of mail will this produce for the airlines and can they carry it without adding plane mileage?

3) At what rate will this volume be moved by air — a rate profitable to the airlines and not unduly costly to the government?

4) What modifications would be necessary in the postal rate structure to (a) offset the loss of the air mail premium since there no longer would be a separate classification for first class air mail, and (b) cover any additional costs involved by the Post Office Department?

### Mail Traveling 300 Miles or More Can be Expedited Via Air

It is generally agreed that mail traveling 300 miles or more can be expedited through transportation via air. This was confirmed by an experiment conducted by the writer about three years ago. In this experiment an equal amount of letters were sent by regular and air mail means between downtown points in fifteen of the more important cities east of the Mississippi in order to determine relative speeds in delivery. The letters (an air mail and regular to each destination) were dropped in street mail boxes at 9:00 a.m., 12:30 p.m and 5:00 p.m. In the 9:00 a.m. mailings there were no significant savings via air for mail traveling under 300 miles and the saving for mail traveling from 300 to 500 miles was largely a matter of getting the mail on an earlier morning delivery. The reason for this is simple. No matter how fast the 9:00 a.m. mail is transported, it cannot be delivered the same day and whether the mail lays over in the Post Office of destination or spends some of that layover time on slower means of transportation makes little difference. Significant savings were made for 9:00 a.m. mail traveling over 500 miles.

In the case of the 12:30 p.m. mailings, there was again no significant savings for air mail traveling under 300 miles. However, there was an average saving of eight hours in the mail traveling between 300 and 400 miles, 14 hours for mail traveling between 400 and 500 miles and 20 hours for mail traveling between 500 and 600 miles.

The biggest mail load entering the collection boxes occurs at the close of the business day and the 5:00 p.m. mailings showed some savings even for air mail traveling 100 to 200 miles, significant savings for air mail traveling 200 to 300 miles and very substantial savings for mail traveling 300 miles or more.

### *Add 125,000,000 Mail Ton Miles With Little or No Additional Plane Mileage*

The next question that comes to mind is what such a move would mean in additional volume of traffic for the domestic airlines? Fortunately, there is sufficient good information available to come up with a reasonably accurate estimate. Based on the level of non-local first class mail volumes for fiscal 1953, it would appear that if all such mail destined for distances of 300 miles or more were shipped by air about 125,000,000 additional ton miles of traffic would be carried by the airlines. A mail ton mile equals one ton of mail moved one mile.

This is an important addition to mail volumes now being carried by air. In the 12 months to June 30, 1953 the domestic trunks carried 69,000,000 ton miles of mail and the local service carriers 1,000,000 ton miles. With this additional 125,000,000 added the total comes to 195,000,000 ton miles, or almost three times as much as they are now carrying. Of the 70,000,000 ton miles the domestic lines carried in fiscal 1953, about 60 percent moved on letter rates and 40 percent as air parcel post. Thus, as far as letter mail is concerned, the increase is from 42,000,000 to 167,000,000 ton miles, a four-fold increase.

Table 1 shows the method used to arrive at the estimate of first class mail volumes as it moves by various distances. Every year, the Post Office Department publishes its *Cost Ascertainment Report* which contains a great deal of extremely interesting and valuable information regarding the mail service. During 1942, or thereabouts, while *Air Cargo, Inc.* was a cargo research organization for the airlines, the Post Office Department gave them certain data from which they were able to classify mail volumes by distance. The percentages so developed, based on fiscal 1941 non-local first class mail, are set forth by Column 2 of Table 1. These percentages should still be good for estimating present first class mail volumes by distance because the average haul of all first class mail has not been changed materially, having been 468 miles in fiscal 1941 and 501 in 1953. The remainder of Table 1 should be self-explanatory.

This table deals with first class mail ton miles, exclusive of the weight of the pouch and lock. This is an important point because in many instances the pouch and the lock weigh more than the mail contained, and the pouch and the lock apparently create a substantial amount of "mail" ton miles. This can be seen from the fact that the domestic trunk and local service carriers reported 70,000,000 mail ton miles (mail, pouch and lock) in fiscal 1953, which is considerably more than the "net" reported by the Post Office Department.

The Post Office Department *Cost Ascertainment Report* for fiscal 1953 shows net originating domestic air mail at 47,106,000 ton miles with the domestic haul of originating international air mail at 2,711,000 ton miles. Assuming that terminating foreign air mail is an equal amount, this adds 5,422,000 mail ton miles. Free mail for the Armed Forces adds another 1,215,000 ton miles. There is some penalty,

franked, and free-for-the-blind mail sent by air which is not included in this 54,000,000 total and the amounts are not stated in the *Cost Ascertainment Report.* Assuming the net weight for all mail shipped domestically at 56,000,000 ton miles, it appears that the pouch and lock add 25 percent to the total ton miles carried by the domestic lines.

It will be noted from Table 1 that the first class mail traveling 400 miles or more amounts to 106,000,000 ton miles. In the estimate of 125,000,000 ton miles one quarter of the mail ton miles moving under 400 miles has been added (for mail moving between 300 and 400 miles) and ten percent added for the pouch and lock. This should prove a conservative estimate.

It should not be much of a problem for the domestic lines to carry this mail without increasing service specifically for this purpose. In the 12 months to March 31, 1954 the domestic lines flew a capacity of 3,107,000,000 ton miles available for traffic. Revenue traffic was 1,722,-000,000 ton miles, or a use of 55.42 percent of the total. Thus, the addition of 125,000,000 of traffic would have raised the total load factor to 59.44 percent. That is a workable load factor. In 1952 the load factor for the domestic trunk lines averaged 58.93 percent and in 1951 it was 61.04 percent. While it is recognized that the problem is not as simple as stated, since a considerable amount of the available ton miles are flown at times when there would not be much mail available, nevertheless, with cooperation between the airlines and the Post Office there should be little difficulty in handling the mail with little delay and without adding mileage on this account.

### *At 30c Per Mail Ton Mile Add Approximately $25,000,000 Revenue and Net Earnings*

At the present time the airlines carrying the bulk of the air mail within the Continental United States receive 45c per mail ton mile for carrying this mail, with all the trunk lines averaging about 47c. This is considered a service rate designed to cover costs and provide a reasonable profit. A change in the formula is currently under discussion and it appears likely that this rate will be reduced to about 40c and 42c respectively.

For carrying the first class mail under the experiments mentioned, the ton mile rates have ranged between 18.6c and 20.04c. In the West Coast experiment, which the Post Office would like to see started and in operation for this year's Christmas mail, the Post Office is proposing to pay only 18.98c per mail ton mile. While the carriers are required to give air mail top priority over all other traffic and this experimental mail is carried on a "space available" basis, this spread in rates is too high for this factor to account for this difference.

In the development of the rates for carrying this regular first class mail by air, the Post Office is not concerned with whether or not the rate adequately covers costs of the airline applicable thereto and provides a reasonable profit. They are interested only in finding a rate

at which over-all costs would be no different than present costs via the railroads. They even take into account the anticipated loss in revenues as the public starts replacing six cent air mail stamps with three cent regular mail stamps for mail being sent over the experimental routes. Therefore, the airlines assume this Post Office revenue loss in the determination of the money received for carrying this mail.

The airlines have been willing to go along on this basis because on an "added cost" basis they feel they are ahead. Therefore, the experiment is being conducted at no additional cost to the Post Office and the public is getting much more service for three cents. This may be all right for a limited experiment but not for the long pull over a vastly extended operation. The airlines are getting less for handling this mail than the railroads receive on an over-all basis.

In fiscal 1953 the railroads were paid $344,569,000 for transportation of the mail and for certain terminal facilities and the like. Of this amount $40,965,000 was applicable to the transportation of first class mail. The first class mail volume is estimated at 135,635,000 net ton miles and not all of this is carried by the railroads. Assuming it was all carried by the railroads and that ten percent is added for the pouch and lock, the railroads received 27.5c per ton mile for the transportation of first class mails. Since the close of fiscal 1953 the railroads have received a 10 percent increase in handling the mail so this figure is now over 30c.

The railroads will take exception to this 30c figure on the grounds that the bulk of the pay to the railroads applicable to first class mail is for rail post office distribution space, rather than to the weight of the mail. That is true in that they are also transporting railway mail clerks and providing working space for such employees. However, that is very expensive space to the Post Office Department and the equivalent stationary expense at airports would cost only a small fraction thereof. Furthermore, if used at airports instead of on the move, the efficiency of such employees would probably be higher simply because it should be easier to work at a fixed base. In addition, the Post Office would make a further saving in traveling expenses. Perhaps it would be more correct to say that it costs the Post Office 30c per ton mile in payments to the railroads in connection with the transportation of first class mail.

By accepting these low rates for these experiments the airlines may be placing themselves into a position whereby it will be difficult to get much more than 20c per ton mile if all the mail were shipped by air where it can be expedited. In fiscal 1953 the service pay to the domestic trunks was $32,315,000 for 68,945,000 ton miles of mail, or 47c per ton mile. If during that period all mail had been shipped by air they would have carried in the neighborhood of 190,000,000 mail ton miles, allowing 5,000,000 for the local service lines. At present experimental rates, which are in the neighborhood of 20c per ton mile, this would mean revenues of only $38,000,000. Under those conditions

the airlines would be carrying approximately 170 percent more mail for a 20 percent increase in pay.

Many people think that the airlines should be glad to carry the mail at 20c per ton mile. They point to the fact that the airlines carry freight at an average yield of 22.5c and that there is less expense in handling mail than there is in handling freight. There are two arguments against this. First, the 22.5c freight yield is an average for handling large and small shipments and the yield for handling small shipments of the size of air mail sacks is estimated at 20 percent higher than the average yield. More important, however, is the fact that air freight yields are set as low as possible to develop traffic. These rates do not cover fully allocated costs and the hope is that they bring in enough revenue to do a little more than cover the added costs. This approach is reasonable and necessary in the still developmental stages of the air freight business. These rates should not control the rates for handling the mail.

The finances of the Post Office Department and the receipts of the U. S. Treasury would be better off if all first class mail that can be expedited were shipped by air, through a modification of the postal rate structure, a modification which should be readily acceptable to Congress and the public. Under these conditions it is only fair to pay the airlines their fully allocated costs plus a reasonable profit. For fiscal 1953 that rate has been determined by the Civil Aeronautics Board as being 47c for the trunk lines. A modification now under consideration would reduce this to about 42c. At 42c, the estimated 190,000,000 ton miles would bring in approximately $80,000,000, or about $48,000,000 more than was received at service rates in 1953. However, when the Post Office finally gets around to shipping all first class mail by air, there will be a hearing to determine the rate to be paid and the Post Office Department undoubtedly has a substantially different idea as to a proper rate than the airlines.

One should not count on the airlines getting 42c per mail ton mile as a result of these hearings. It would probably be more conservative to expect something in the neighborhood of 30c. This would bring in about $57,000,000 of mail pay to the domestic trunk lines, an increase of $25,000,000 over the service rate received in fiscal 1953. The carrying of this additional mail should not result in very much additional expense. This means that most of this new revenue will be reflected directly in net earnings. In the 12 months to March 31, 1954 the domestic trunk lines reported net operating income before taxes, interest, etc. of $75,000,000. This development would mean a substantial improvement in such net results.

### Modification in Postal Rates

If all non-local mail were shipped by air where it can be expedited there would be no need for a separate air mail classification and the

Post Office would lose the premium now paid for air mail service. At the present time all first class mail, local and non-local, moves at the three cent rate. Not too many years ago the Post Office had two rates, one for local and another for non-local mail. In view of the expeditious treatment for non-local mail under this program it is suggested that the rate for non-local mail be raised one cent above the local rate. Since there are about 18 billion pieces of non-local first class mail annually, this would raise $180,000,000. However, a total of about $30,000,000 would be lost in present air mail premiums, so that the net revenue gain to the Post Office would be about $150,000,000.

Expenses of the Post Office should not show material change and this $150,000,000 should be largely a net gain. In the West Coast experiment the Post Office has estimated that they could pay the airlines 22.67c per ton mile and not incur additional expenses over those involved in using surface transportation. This is apart from any loss of postal revenue. At 30c per ton mile, such additional cost of seven cents would be about $14,000,000 for 200,000,000 ton miles of mail involved. Against this the Post Office would save close to this amount through a reduction in present air mail payments from the 45c level to the 30c level. This estimate of no additional costs assumes that costs developed for the current experiments are representative of costs which would result on the average throughout the country, an assumption which may not be correct. For this reason a cushion of $10,000,000 is being allowed in making the estimate of $140,000,000 of net benefits to the Post Office Department.

This program will require far-sighted leadership of the type now being provided by Postmaster General Arthur E. Summerfield in initiating the experiments. Despite barriers certain to be thrown in its path, the program is worth pushing now toward the dividends it will quickly pay in speedier mail service. The effort also will pay off in a stronger air carrier industry in an era when its health and vigor are essential to national survival. It will provide a very satisfactory means of reducing the postal deficit. Canada has had this program in effect for over a year.

## ESTIMATED TON MILEAGE OF NON-LOCAL DOMESTIC FIRST CLASS MAIL ACCORDING TO DISTANCE TRANSPORTED — Fiscal Year, 1953

| *Mileage Block* (1) | *First Class Pound Distance Percentages*[1] (2) | *Distributed First Class Mail Tonnage*[2] (3) | *Estimated First Class Mail Ton Miles*[3] (4) | *Corrected Estimate of First Class Mail Ton Miles*[4] (5) | *Percentage Distribution First Class Mail Ton Miles* (6) |
|---|---|---|---|---|---|
| 0 — 399 | 56.27% | 152,044 | 30,408,800 | 29,394,000 | 21.70% |
| 400 — 599 | 13.69 | 36,990 | 18,495,000 | 17,867,000 | 13.19 |
| 600 — 799 | 10.93 | 29,534 | 20,674,000 | 19,980,000 | 14.75 |
| 800 — 1,199 | 9.91 | 26,777 | 26,777,000 | 25,872,000 | 19.10 |
| 1,200 — 1,599 | 3.63 | 9,808 | 13,731,000 | 13,261,000 | 9.79 |
| 1,600 and Over | 5.57 | 15,050 | 30,100,000 | 29,082,000 | 21.47 |
| Totals | 100.00% | 270,203 | 140,187,800 | 135,456,000 | 100.00% |

[1] Poundage distribution developed by Air Cargo, Inc., on basis of fiscal 1941 data supplied by Cost Ascertainment Division, U. S. Post Office Department.

[2] First Class Non-Local Mail Tonnage, fiscal year 1953, as calculated from data in Cost Ascertainment Report, Post Office Department, Table 4—270,203 tons which amount has been distributed according to percentages in Column (2).

[3] First Class mail tonnages multiplied by mid-points of mileage blocks, with 2,000 miles the assumed average distance for 1,600 *and over* range.

[4] Cost Ascertainment Division reported first class non-local mail ton mileage of 135,456,000 which has been distributed in accordance with proportions of Column (4) as shown by Column (6).